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•				Application Number	10/585,504	
II.	IFORMATION	I DI	SCLOSURE	Filing Date	February 14, 2008	
s	TATEMENT E	3Y /	APPLICANT	First Named Inventor	Haolun Jin	
				Art Unit	4161	
	(Use as many sh	eets as	necessary)	Examiner Name	McDowell, Brian E.	
Sheet	1	of	6	Attorney Docket Number	587.PFUS	

			U.S. PA	TENT DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear
	*	US-4,816,570	03-28-1989	Farquhar	
	*	US-4,968,788	11-06-1990	Farquhar	
	*	US-5,663,159	09-02-1997	Starrett, Jr. et al.	
	*	US-5,792,756	08-11-1998	Starrett, Jr. et al.	
	*	US-5,798,340	08-25-1998	Bischofberger et al.	
	*	US-6,245,806	06-12-2001	Dombrowski et al.	-
	*	US-6,271,402	08-07-2001	Singh et al.	
	*	US-6,312,662	11-06-2001	Erion et al.	
	*	US-6,395,743	05-28-2002	Heimbuch et al.	
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		FOREI	GN PATENT	DOCUMENTS		
Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,	
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		WO-91/19721	12-26-1991	Glazier Arnold		
		WO-96/15111	05-23-1996	Univ Minnesota		
		WO-99/62513	12-09-1999	Merck & Co Inc et al.		
		WO-99/62520	12-09-1999	Merck & Co Inc et al.		
		WO-00/75122	12-14-2000	Shionogi & Co et al.		
		WO-01/00578	01-04-2001	Merck & Co Inc et al.		

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			U.S. PATE	NT DOCUMENTS	
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		WO-02/055079	07-18-2002	Merck & Co Inc et al.		
		WO-02/30426	04-18-2002	Merck & Co Inc et al.		
		WO-02/30930	04-18-2002	Merck & Co Inc et al.	14	
		WO-02/30931	04-18-2002	Merck & Co Inc et al.		
		WO-02/36734	05-10-2002	Merck & Co Inc et al.		
		WO-03/035076	05-01-2003	Angeletti P Ist Richerche Bio et al.		\Box
		WO-03/035077	05-01-2003	Angeletti P Ist Richerche Bio et al.		
		WO-04/062613	07-29-2004	Squibb Bristol Myers Co et al.		
		WO-04/096128	11-11-2004	Squibb Bristol Myers Co et al.		
		WO-05/061490	07-07-2005	Shionogi & Co et al.		П

	
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Sheet	3	of	6	Attorney Docket Number	587.PFUS	

		NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	T
Examiner nitials	Cite No. ¹	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
		ALMANSA et al. (1995) "4-(2-Pyridyl)-2,2-Dimethylnaphthalen-1-Ones as New Potassium Channel Activators with Increased Airways Selectivity," <i>Bioorganic & Medicinal Chemistry Letters</i> 5(16):1833-1838	
		ARTICO et al. (1998) "Geometrically and Conformationally Restrained Cinnamoyl Compounds as Inhibitors of HIV-1 Integrase: Synthesis, Biological Evaluation, and Molecular Modeling," J.Med. Chem. 41:3948-3960	
		BALSIGER et al. (1959) "Synthesis of Potential Anticancer Agents, XVIII. Analogs of Carbamoyl Phosphate," <i>J. Org. Chem.</i> 24(3):434-436	
		BEAUCHAMP et al. (1992) "Amino Acid Ester Prodrugs of Acyclovir," <i>Antiviral Chemistry & Chemotherapy</i> 3(3):157-164	
		BENZARIA et al. (1996) "Synthesis, in Vitro Antiviral Evaluation, and Stability Studies of Bis(S-Acyl-2-thioethyl) Ester Derivatives of 9-[2-(Phosphonomethoxy)ethyl]adenine (PMEA) as Potential PMEA Prodrugs with Improved Oral Bioavailability," <i>J. Med. Chem.</i> 39:4958-4965	
		BEUSEN et al. (1995) 'Solid -State Nuclear Resonance Analysis of the Conformation of an Inhibitor Bound to Thermolysin," <i>J.Med. Chem.</i> 38:2742-2747	
		BHUTA et al. (1980) "Analogues of Chloramphenicol: Circular Dichroism Spectra, Inhibition of Ribosomal Peptidyltransferase, and Possible Mechanism of Action," <i>J. Med. Chem.</i> 23:1299-1305	
		BIGGE et al. (1992) "Exploration of N-Phosphonoalkyl-, N-Phosphonalkenyl-, and N-(Phosphonoalkyl)phenyl-Spaced α-Amino Acids as Competitive N-Methyl-D-Aspartic Acid Antagonists," <i>J. Med. Chem.</i> 68:1371-1384	
		BUNDGAARD, H. (1991) "Design and Application of Prodrugs," <i>Textbook of Drug Design and Development</i> 113-191	
		BUOLAMWINI and ASSEFA (2002) "CoMFA and CoMSIA 3D QSAR and Docking Studies on Conformationally-Restrained Cinnamoyl HIV-1 Integrase Inhibitors: Exploration of a Binding Mode at the Active Site," <i>J. Med. Chem.</i> 45:841-852	
		BURGER and ANDERSON (1957) "Monoesters and Ester-amidates of Aromatic Phosphonic Acids," <i>J. Am Chem Soc.</i> 79:3575-3579	
-		CAMPAGNE et al. (1995) "(1H-Benzotriazol-1-yloxy)tris(dimethylamino)phosphonium Hexafluorophosphate- and (1H-Benzotriazol-1yloxy)tripyrrolidinophosphonium Hexafluorophosphate-Mediated Activation of Monophosphonate Esters: Synthesis of Mixed Phosphonate Diesters, the Reactivity of the Benzotriazolyl Phosphonic Esters vs the Reactivity of the Benzotriazolyl Carboxylic Esters," <i>J. Org. Chem.</i> 60:5214-5223	
		CARTER et al. (1965) "Carbobenzoxy Chloride and Derivatives," <i>Organic Syntheses Collective</i> 3:167-169	
		CHEN et al. (1997) "Design, Synthesism and Biochemical Evaluation of Phosphonate and Phosphonamidate Analogs of Glutathionylspermidine as Inhibitors of Glutathionylspermidine Synthetase/Amidase from Escherichia Coli," <i>J. Med. Chem.</i> 40:3842-3850	
		COLEMAN and CARPENTER (1992) "Synthesis of the Aziridino[1,2-a]pyrrolidine Substructure of the Antitumor Agents," <i>J. Org. Chem.</i> . 57:5813-5815	
	_	COREY and SUGGS (1973) "Selective Cleavage of Allyl Ethers Under Mild Conditions by Transition Metal Reagents," <i>J. Org. Chem.</i> 38(18):3224	
		DARBY, G. (1995) "In Search of the Perfect Antiviral," <i>Antiviral Chemistry & Chemotherapy</i> 6(Suppl.1):54-63	

PTO/SB/08b (01-08)
Approved for use through 07/31/2008, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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INF	ORMATIC	ON DISC	CLOSURE	Filing Date	February 14, 2008	
ST	ATEMEN	T BY AF	PLICANT	First Named Inventor	Haolun Jin	
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	(Use as many	sheets as ne	cessary)	Examiner Name	McDowell, Brian E.	
Sheet	4	of	6	Attorney Docket Number	587.PFUS	

	DE LOMBAERT et al. (1994) "N-Phosphonomethyl Dipeptides and Their Phosphonate Prodrugs, A New Generation of Neutral Endopeptidase (NEP, EC 3,4,24.11) Inhibitors," <i>J. Med. Chem.</i> 37:498-511
	EFFENBERGER and BRODT (1985) "2(1h)-Pyridon als Austtittsgruppe bei Acylierungsreaktionen-Anwendungen in der Peptidchemie," CHEM BER 118:468-482
	EFIMOV et al. (1998) "Synthesis of DNA Analogues with Novel Carboxamidomethyl Phosphonamide and Glycinamide Internucleoside Linkages," <i>Bioorganic & Medicinal Chemistry Letters</i> 8:1013-1018
:	ESPESETH et al. (2000) "HIV-1 Integrase Inhibitors that Compete with the Target DNA Substrate Define A Unique Strand Transfer Conformation for Integrase," <i>PNAS</i> 97(21):11244-11249
	FARNET et al. (1996) "Differential Inhibition of HIV-1 Preintegration Complexes and Purified Integrase Protein by Small Molecules," <i>Proc. Natl. Acad. Sci. USA</i> 93:9742-9747
	FARQUHAR et al. (1983) "Biologically Reversible Phosphate-Protective Groups," <i>Journal of Pharmaceutical Sciences</i> 72(3):324-325
	GALEOTTI et al. (1996) "A Straightforward Synthesis of Amino Phosphonate Monoesters Using BroP or TPyCIU," Tetrahedron Letters 37(23):3997-3998
	GALI et al. (2000) "Facile Ring-Opening Reactions of Phthalimides as a New Strategy to Synthesize Amide-Functionalized Phosphonates, Primary Phosphines, and Bisphosphines," <i>J. Org. Chem.</i> 65:676-680
	GOLDGUR et al. (1999) "Structure of the HIV-1 Integrase Catalytic Domain Complexed with an Inhibitor: A Platform for Antiviral Drug Design," <i>PNAS</i> 98(23):13040-13043
	GRIFFIN and BURGER (1956) "D-Glucopyranose 6-Deoxy-6-Phosphonic Acid," JAM Chem Soc. 78(10):2336-2338
	HAKIMELAHI et al. (1995) "Design, Synthesis, and Structure - Activity Relationship of Novel Dinucleotide Analogs as Agents against Herpes and Human Immunodeficiency Viruses," <i>J. Med. Chem.</i> 38:4648-4659
	HAZUDA et al. (1994) "A Novel Assay for the DNA Strand -Transfer Reaction of HIV-1 Integrase," Nucleic Acids Research 22(6):1121-1122
	HAZUDA et al. (1997) "Differential Divalent Cation Requirements Uncouple the Assembly and Catalytic Reactions of Human Immunodeficiency Virus Type I Integrase," <i>Journal of Virology</i> 71(9):7005-7011
	HAZUDA et al. (1997) "Discovery and Analysis of Inhibitors of the Human Immunodeficiency Integrase," <i>Drug, Design and Discovery</i> 15:17-24
	HAZUDA et al. (2000) "Inhibitors of Strand Transfer that Prevent Integration and Inhibit HIV-1 Replication in Cells," <i>Science</i> 287:646-650
	HUGHES, D. (1992) "The Mitsunobu Reaction," Organic Reactions 42:335-381
	HUNIG et al. (1965) "The Chemistry of Diimine," Angew Chem. Internat. Edit. 4(4):271-280
	JACOB, Peyton III (1982) "Resolution of -5- Bromonornicotine. Synthesis of (R)- and (S)- Nornicotine of High Enantiomeric Purity," <i>J. Org. Chem.</i> 47:4165-4167
	JING et al. (2002) "Potassium-Dependent Folding: A Key to Intracellular Delivery of G-Quartet Oligonucleotides as HIV Inhibitors," <i>Biochemistry</i> 41:5397-5403
	KATZMAN and KATZ (1999) "Substrate Recognition by Retroviral Integrases," Advances in Virus Research 52:371-395
	KHAMNEI and TORRENCE (1996) "Neighboring Group Catalysis in the Design of Nucleotide Prodrugs," <i>J. Med. Chem.</i> 39:4109-4115

PTO/SB/08b (01-08)
Approved for use through 07/31/2008. OMB 0651-0031
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	(Use as man	y sheets	as necessary)	Examiner Name	McDowell, Brian E.
Sheet	5	of	6	Attorney Docket Number	587.PFUS

	KHANDAZHINSKAYA et al. (2002) "Carbocyclic Dinucleoside Polyphosphonates: Interaction with HIV Reverse Transcriptase and Antiviral Activity," <i>J. Med. Chem.</i> 45:1284-1291	
	KRISE and STELLA (1996) "Prodrugs of Phosphates, Phosphonates, and Phosphinates," Advanced Drug Delivery Reviews 19:287-310	
	KUNZ and WALDMANN (1985) "71. Synthesis of the Glycopeptid Partial Sequence A80 - A84 of Human Fibroblast Interferon," <i>Helvetica Chimica Acta</i> 68:618-622	
	LAFEMINA et al. (1992) "Requirement of Active Human Immunodeficiency Virus Type 1 Integrase Enzyme for Productive Infection of Human T-Lymphoid Cells," <i>Journal of Virology</i> 66(12):7414-7419	
	LOCHMULLER, C. (1975) "Chromatographic Resolution of Enantiomers Selective Review," Journal of Chromatography 113:283-302	
	MATTSON et al. (1990) "An Improved Method for Reductive Alkylation of Amines Using Titanium (IV) Isopropoxide and Sodium Cyanoborohydride ¹ ," <i>J. Org. Chem.</i> 55:2552-2554	
	MITCHELL et al. (1992) "Bioreversible Protection for the Phospho Group: Bioactivation of the Di(4-acyloxybenzyl) and Mono(4-acyloxybenzyl) Phosphoesters of Methylphosphonate and Phosphonoacetate," <i>J. Chem. Sco. Perkin Trans.</i> 2345-2353	
	MLADENOVA et al. (1995) "An Efficient Synthesis of Enediyne and Arenediyne Lactams," Synthetic Communications 25(9):1401-1410	
	MORGAN et al. (1994) "Structure-Based Design of an Inhibitor of the Zinc Peptidase Thermolysin," <i>J. Am. Chem. Soc.</i> 116:3251-3260	
	MORR et al. (2001) 'Formation of Phostonic Acids During the Reduction of Azidonucleosidephosphonic Acids," <i>Tetrahedron Letters</i> 42:8841-8843	
	MORRIS and WISHKA (1991) "Vinyl Sulfonyl Esters and Amides in the Synthesis of Substituted δ-Sultams and δ-Sultones," <i>J. Org. Chem.</i> 56:3549-3556	
	MOSS et al. (1987) "A Convenient Preparation of 1,2-Diacyglycerols: our -lodobenzoyl as a Protecting Group," <i>Tetrahedron Letters</i> 28(42):5005-5008	
	MUSIOL et al. (1994) "On the Synthesis of Phosphonamidate Peptides," <i>J. Org. Chem.</i> 59:6144-6146	
-	NAIR, V. (2002) "HIV Integrase as a Target for Antiviral Chemotherapy," Rev. Med. Virol. 12:179-193	
	NEAMATI, N. (2002) "Patented Small Molecule Inhibitors of HIV-1 Integrase: A 10-Year Saga," Expert Opin. Ther. Patents. 12(5):709-724	
	NEUSTADT, B. (1994) "Facile Preparation of N-(Sulfonyl)carbamates," <i>Tetrahedron Letters</i> 35(3):379-380	
	OKAMOTO et al. (1990) "Optical Resolution of Dihydropyridine Enantiomers by High- Performance Liquid Chromatography Using Phenylcarbamates of Polysaccharides as a Chiral Stationary Phase," <i>Journal of Chromatography</i> 513:375-378	
	OLIYAI et al. (1999) "Aryl Ester Prodrugs of Cyclic HPMPC.I: Physicochemical Characterization and <i>In Vitro</i> Biological Stability," <i>Pharmaceutical Research</i> 16(11):1687-1693	
	OLIYAI et al. (1999) "Enhanced Chemical Stability of the Intracellular Prodrug, 1-[((S)-2-Hydroxy-2-Oxo-1,4,2-Dioxaphosphorinan-5-yl)methyl] Cytosine, Relative to its Parent Compound, Cidofovir," International Journal of Pharmaceutics 179:257-265	
	PAIS et al. (2002) "Structure Activity of 3-Aryl-1,3-Diketo-Containing Compounds as HIV-1 Integrase Inhibitors1," <i>J. Med. Chem.</i> 45:3184-3194	
	PALELLA et al. (1998) "Declining Morbidity and Mortality Among Patients with Advanced Human Immunodeficiency Virus Infection," <i>The New England Journal of Medicine</i> 338(13):853-860	

PTO/SB/08b (01-08)
Approved for use through 07/31/2008. OMB 0651-0031
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heet	6	of	6	Attorney Docket Number	587.PFUS

PHILLION and ANDREW (1986) "Synthesis and Reactivity of Diethyl Phosphonomethyltriflate," <i>Tetrahedron Letters</i> 27(13):1477-1480 POMMIER and NEAMATI (1999) "Inhibitors of Human Immunodeficiency Virus Integrase," <i>Advances in Virus Research</i> 52:427-459 POMMIER et al. (2000) "Retroviral Integrase Inhibitors Year 2000: Update and Perspectives," <i>Antiviral Research</i> 47:139-148 PUECH et al. (1993) "Intracellular Delivery of Nucleoside Monophosphates Through A Reductase-Mediated Activiation Process," <i>Antiviral Research</i> 22:155-174 PUNGENTE and WEILER (2001) "Synthesis and Stereochemical Elucidation of a 14-Membered Ring Phosphonate," <i>Organic Letters</i> 3(5):643-646 RICHMAN, D. (2001) "HIV Chemotherapy," <i>Nature</i> 410:995-1001 ROACH et al. (1987) "Fluorescence Detection of Alkylphosphonic Acids Using p-(9-Anthroyloxy)phenacyl Bromide," <i>Anal. Chem.</i> 59:1056-1059 ROSENBERG and HOLY (1987) "Synthesis of Potential Prodrugs and Metabolites of 9-(<i>S</i>)-(3 Hydroxy-2-Phosphonylmethoxypropyl)Adenine," <i>Collection Czechoslovak Chem. Comm.</i> 52:2792-2800 SAADY et al. (1995) "Selective Monodeprotection of Phosphonate, Phosphite, Phosphonate, and Phosphoramide Benzyl Esters," <i>J. Org. Chem.</i> 60:2946-2947 SARDINA et al (1986) "Studies on the Synthesis of Side-Chain Hydroxylated Metabolites of Vitamin D. 2. Stereocontrolled Synthesis of 25-Hydroxyvitamin D2 ¹ ," <i>J. Org. Chem.</i> 51:1264-
POMMIER and NEAMATI (1999) "Inhibitors of Human Immunodeficiency Virus Integrase," Advances in Virus Research 52:427-459 POMMIER et al. (2000) "Retroviral Integrase Inhibitors Year 2000: Update and Perspectives," Antiviral Research 47:139-148 PUECH et al. (1993) "Intracellular Delivery of Nucleoside Monophosphates Through A Reductase-Mediated Activiation Process," Antiviral Research 22:155-174 PUNGENTE and WEILER (2001) "Synthesis and Stereochemical Elucidation of a 14- Membered Ring Phosphonate," Organic Letters 3(5):643-646 RICHMAN, D. (2001) "HIV Chemotherapy," Nature 410:995-1001 ROACH et al. (1987) "Fluorescence Detection of Alkylphosphonic Acids Using p-(9- Anthroyloxy)phenacyl Bromide," Anal. Chem. 59:1056-1059 ROSENBERG and HOLY (1987) "Synthesis of Potential Prodrugs and Metabolites of 9-(S)-(3) Hydroxy-2-Phosphonylmethoxypropyl)Adenine," Collection Czechoslovak Chem. Comm. 52:2792-2800 SAADY et al. (1995) "Selective Monodeprotection of Phosphonate, Phosphite, Phosphonate, and Phosphoramide Benzyl Esters," J. Org. Chem. 60:2946-2947 SARDINA et al (1986) "Studies on the Synthesis of Side-Chain Hydroxylated Metabolites of Vitamin D. 2. Stereocontrolled Synthesis of 25-Hydroxyvitamin D21," J. Org. Chem. 51:1264-
Antiviral Research 47:139-148 PUECH et al. (1993) "Intracellular Delivery of Nucleoside Monophosphates Through A Reductase-Mediated Activiation Process," Antiviral Research 22:155-174 PUNGENTE and WEILER (2001) "Synthesis and Stereochemical Elucidation of a 14-Membered Ring Phosphonate," Organic Letters 3(5):643-646 RICHMAN, D. (2001) "HIV Chemotherapy," Nature 410:995-1001 ROACH et al. (1987) "Fluorescence Detection of Alkylphosphonic Acids Using p-(9-Anthroyloxy)phenacyl Bromide," Anal. Chem. 59:1056-1059 ROSENBERG and HOLY (1987) "Synthesis of Potential Prodrugs and Metabolites of 9-(S)-(3 Hydroxy-2-Phosphonylmethoxypropyl)Adenine," Collection Czechoslovak Chem. Comm. 52:2792-2800 SAADY et al. (1995) "Selective Monodeprotection of Phosphonate, Phosphite, Phosphonate, and Phosphoramide Benzyl Esters," J. Org. Chem. 60:2946-2947 SARDINA et al (1986) "Studies on the Synthesis of Side-Chain Hydroxylated Metabolites of Vitamin D. 2. Stereocontrolled Synthesis of 25-Hydroxyvitamin D21," J. Org. Chem. 51:1264-
Reductase-Mediated Activiation Process," Antiviral Research 22:155-174 PUNGENTE and WEILER (2001) "Synthesis and Stereochemical Elucidation of a 14-Membered Ring Phosphonate," Organic Letters 3(5):643-646 RICHMAN, D. (2001) "HIV Chemotherapy," Nature 410:995-1001 ROACH et al. (1987) "Fluorescence Detection of Alkylphosphonic Acids Using p-(9-Anthroyloxy)phenacyl Bromide," Anal. Chem. 59:1056-1059 ROSENBERG and HOLY (1987) "Synthesis of Potential Prodrugs and Metabolites of 9-(S)-(3 Hydroxy-2-Phosphonylmethoxypropyl)Adenine," Collection Czechoslovak Chem. Comm. 52:2792-2800 SAADY et al. (1995) "Selective Monodeprotection of Phosphonate, Phosphite, Phosphonate, and Phosphoramide Benzyl Esters," J. Org. Chem. 60:2946-2947 SARDINA et al (1986) "Studies on the Synthesis of Side-Chain Hydroxylated Metabolites of Vitamin D. 2. Stereocontrolled Synthesis of 25-Hydroxyvitamin D21," J. Org. Chem. 51:1264-
Membered Ring Phosphonate," <i>Organic Letters</i> 3(5):643-646 RICHMAN, D. (2001) "HIV Chemotherapy," <i>Nature</i> 410:995-1001 ROACH et al. (1987) "Fluorescence Detection of Alkylphosphonic Acids Using p-(9-Anthroyloxy)phenacyl Bromide," <i>Anal. Chem.</i> 59:1056-1059 ROSENBERG and HOLY (1987) "Synthesis of Potential Prodrugs and Metabolites of 9-(<i>S</i>)-(3 Hydroxy-2-Phosphonylmethoxypropyl)Adenine," <i>Collection Czechoslovak Chem. Comm.</i> 52:2792-2800 SAADY et al. (1995) "Selective Monodeprotection of Phosphonate, Phosphite, Phosphonate, and Phosphoramide Benzyl Esters," <i>J. Org. Chem.</i> 60:2946-2947 SARDINA et al (1986) "Studies on the Synthesis of Side-Chain Hydroxylated Metabolites of Vitamin D. 2. Stereocontrolled Synthesis of 25-Hydroxyvitamin D21," <i>J. Org. Chem.</i> 51:1264-
ROACH et al. (1987) "Fluorescence Detection of Alkylphosphonic Acids Using p-(9-Anthroyloxy)phenacyl Bromide," Anal. Chem. 59:1056-1059 ROSENBERG and HOLY (1987) "Synthesis of Potential Prodrugs and Metabolites of 9-(S)-(3 Hydroxy-2-Phosphonylmethoxypropyl)Adenine," Collection Czechoslovak Chem. Comm. 52:2792-2800 SAADY et al. (1995) "Selective Monodeprotection of Phosphonate, Phosphite, Phosphonate, and Phosphoramide Benzyl Esters," J. Org. Chem. 60:2946-2947 SARDINA et al (1986) "Studies on the Synthesis of Side-Chain Hydroxylated Metabolites of Vitamin D. 2. Stereocontrolled Synthesis of 25-Hydroxyvitamin D21," J. Org. Chem. 51:1264-
Anthroyloxy)phenacyl Bromide," <i>Anal. Chem.</i> 59:1056-1059 ROSENBERG and HOLY (1987) "Synthesis of Potential Prodrugs and Metabolites of 9-(<i>S</i>)-(<i>3</i> Hydroxy-2-Phosphonylmethoxypropyl)Adenine," <i>Collection Czechoslovak Chem. Comm.</i> 52:2792-2800 SAADY et al. (1995) "Selective Monodeprotection of Phosphonate, Phosphite, Phosphonate, and Phosphoramide Benzyl Esters," <i>J. Org. Chem.</i> 60:2946-2947 SARDINA et al (1986) "Studies on the Synthesis of Side-Chain Hydroxylated Metabolites of Vitamin D. 2. Stereocontrolled Synthesis of 25-Hydroxyvitamin D21," <i>J. Org. Chem.</i> 51:1264-
Hydroxy-2-Phosphonylmethoxypropyl)Adenine," Collection Czechoslovak Chem. Comm. 52:2792-2800 SAADY et al. (1995) "Selective Monodeprotection of Phosphonate, Phosphite, Phosphonate, and Phosphoramide Benzyl Esters," J. Org. Chem. 60:2946-2947 SARDINA et al (1986) "Studies on the Synthesis of Side-Chain Hydroxylated Metabolites of Vitamin D. 2. Stereocontrolled Synthesis of 25-Hydroxyvitamin D21," J. Org. Chem. 51:1264-
and Phosphoramide Benzyl Esters," <i>J. Org. Chem.</i> 60:2946-2947 SARDINA et al (1986) "Studies on the Synthesis of Side-Chain Hydroxylated Metabolites of Vitamin D. 2. Stereocontrolled Synthesis of 25-Hydroxyvitamin D ₂ 1," <i>J. Org. Chem.</i> 51:1264-
Vitamin D. 2. Stereocontrolled Synthesis of 25-Hydroxyvitamin D ₂ 1," J. Org. Chem. 51:1264-
Vitamin D. 2. Stereocontrolled Synthesis of 25-Hydroxyvitamin D ₂ 1," J. Org. Chem. 51:1264-
1269
SERAFINOWSKA et al. (1995) "Synthesis and in Vivo Evaluation of Prodrugs of 9-[2-(Phosphonomethoxy)ethoxy]adenine," <i>J. Med. Chem.</i> 38:1372-1379
SHARMA et al (1989) "Spermexatin and Spermexatol: New Synthetic Spermidine-Based Siderophore Analogues," <i>J. Med. Chem.</i> 32:357-367
SUN, Chong-Qing (2002) "A General Synthesis of Dioxolenone Prodrug Moieties," Tetrahedron Letters 43:1161-1164
SZABO et al. (1995) "Solid Phase Synthesis of 5'-Methylenephosphonate DNA," <i>Nucleosides</i> & <i>Nucleotides</i> 14(3-5):871-874
TSUSHIMA et al. (1988) "Fluorine-Containing Amino Acids and Their Derivatives 7.1 Synthesis and Antitumor Activity of α- and γ-Substituted Methotrexate Analogs," <i>Tetrahedron</i> 44(17):5375-5387
VAN DER LAAN et al. (1996) "An Approach Towards the Synthesis of Oligomers Containing a N-2-Hydroxyethyl-aminomethylphosphonate Backbone: A Novel PNA Analogue," <i>Tetrahedron Letters</i> 37(43):7857-7860
VIEIRA de ALMEIDA et al. (1999) "Synthesis of Deoxy Phosphatidylinositol Analogues and Phosphonate Isosters of Ins(1,4,5)P3," <i>Tetrahedron</i> 55:12997-13010
WOLFE et al. (1996) "The Role of Manganese in Promoting Multimerization and Assembly of Human Immunodeficiency Virus Type 1 Integrase as a Catalytically Active Complex on Immobilized Long Terminal Repeat Substrates," <i>Journal of Virology</i> 70(3):1424-1432
YAMAUCHI et al. (1984) "Synthesis of Peptide Analogues Containing (2- Aminoethyl)phosphonic Acid (Ciliatine) ¹ ," <i>J. Org. Chem.</i> 49:1158-1163
YOUNG, Steven D. (2001) "Inhibition of HIV-1 Integrase by Small Molecules: The Potential for a New Class of AIDS Chemotherapeutics," <i>Current Opinion in Drug Discovery & Development</i> 4(4):402-410
YUAN et al. (2000) "Effect of Carbonate Salts on the Kinetics of Acid-Catalyzed Dimerization of Adefovir Dipivoxil," <i>Pharmaceutical Research</i> 17(9):1098-1103